ACEC-DOT BRIDGE SUBCOMMITTEE

Minutes of November 6, 2006 Meeting

Attendees:

Greg Perfetti, NCDOT (Co-Chair)
Alan Raynor, NCDOT
Lonnie Brooks, NCDOT
Tom Tallman, WSA (Co-Chair)
Tim Rountree, RWA
Domenic Coletti HDR Engineering
Rodney Money, TY Lin
David Simpson (Simpson Engineering)
Peter Graf (LPA)

I. Training

- a. NCDOT has scheduled their NHI LRFD Substructure design course for late April 2007. Due to limited seating, there will not be any available slots for the PEF's. Therefore, ACEC/NC will need to determine if it wants to pursue securing the training seminar on their own. This item should be taken up by our training subcommittee.
- **b.** The latest bridge design workshop on "Accelerated Bridge Construction Techniques" was well received. The workshop series has been very successful and it was deemed worth to continue.
- **c.** We discussed what the next topic should be and determined that a session on "Spliced Precast Prestressed Girder Design" would be appropriate. Domenic will contact several suggested speakers and will organize the session. The date of the next workshop will be in mid to late January.

II. NCDOT/ACEC Joint Conference

A brief discussion was held as to how the latest conference was received. The consensus was that the conference was successful with some very good speakers. It was noted that the variety of speakers this year was excellent especially on Day 1. The topic on health and engineering was especially interesting.

III. Implementation of Design Policies that occur after PEF is under contract or is under contract with Municipality

This discussion stemmed mostly from the recent HS25 design policy and the procedure for determining how it is to be applied if the PEF was already under contract and especially if the work was nearly complete. The following was concluded:

Discussions should occur between the PEF and NCDOT regarding the type of superstructure that is involved along with the status of the completeness of the design. The basic idea is that NCDOT needs their bridges to be compliant with the legal load limit and therefore wishes to have the design policy adhered to immediately. However, there could be circumstances that would warrant a waiver on a case by case basis. One such circumstance would be the need to change the superstructure type (i.e. from cored slab to box or from box to I-girder) that would significantly change the design and construction costs as well as the schedule. Similarly, the design of multi-span plate girders would be looked at as a potential for obtaining a waiver due to the potential significant amount of effort needed to comply. In all situations, discussions must occur between the PEF and NCDOT and a formal letter requesting a waiver must be sent to NCDOT in order to obtain approval to waive this policy for that particular project.

IV. Conversion to LRFD

NCDOT has made significant progress on design program conversions. The updates and LRFD inclusion into the Design Manual will begin at the beginning of the year and is expected out sometime late summer 2007.

NCDOT Structure Design is interested in receiving input from the PEF's if they know of specific instances where other State DOT's have taken exception to any portion of the LRFD Specifications, as these may be something NCDOT should consider. This will be discussed again at our next Subcommittee meeting.

V. Bridge Policy Changes

The following policy memos have been issued since the August meeting:

Guidelines for Integral Abutments

Computing Non-Composite Dead Load Deflections on Steel Bridges – NCDOT is willing to provide a 1 hour seminar regarding this new policy to the Private Engineering Firms. ACECNC needs to obtain a head count of the number of participants that wishes to attend this seminar. This needs to be brought up at the next ACEC Transportation Committee meeting to discuss the process to obtain this information. After the head count has been obtained, we can determine the number of seminars that are needed.

Bridge Rails On Temporary Structure

All of these memos are available on the Structure Design Web Page at:

http://www.doh.dot.state.nc.us/preconstruct/highway/structur/polmemo/

VI. Status of Potential PEFAdvertisements

The following projects were provided by Lonnie Brooks as potential future projects for PEF's;

- November '06 advertisement; November '08 let X-0002B (Fayetteville, NC24) 1 grade separation
- May '07 advertisement; May '09 let
 U-2519DA (Fayetteville Outer Loop) 1 grade separation
- July '07 advertisement; June '10 let
 R-4047 (NC 209 at Lake Junaluska) 1 railroad underpass
- November '07 advertisement; October '10 let R-2527B (Montgomery Co.) 1 railroad underpass

VII. Next Meeting

The next bridge subcommittee meeting will be on **Monday**, **February 5**, **2007** at 9:00 a.m. in Structure Design Conference Room B.